

Until 50 years ago, archaeologists depended on finding objects made of lasting materials, for example stone buildings, broken pieces of pottery, or fossils. Since then, they have discovered how to identify the shape left behind in the hardened soil of wooden or clay buildings, the fibers of nets, or even footprints, even though the objects or people have long since disappeared.

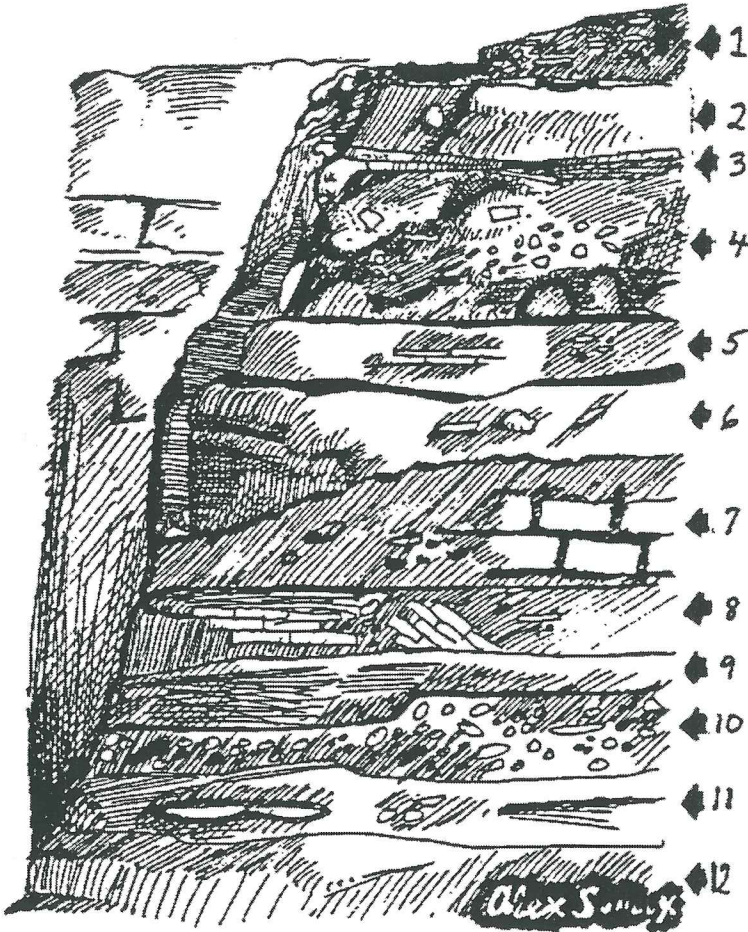
Soil layers stack up and bury old cultures. Each layer, or stratum, represents a historical period. For example, the City of London has 14 feet of previous habitation, and Jericho's 26 layers can be traced for 10,000 years of settlement.

Scientific methods have been developed for dating the objects found in these layers. Carbon-14, a technique which measures the radioactivity found in organic materials, lets us know how long ago the plant or creature was alive. By measuring the disappearance of radioactivity, we can make this estimation. We can also analyze paintings and pottery for clues into a culture. We can analyze the bones of early humanity's ancestors and the bones of their pets and of animals who lived near them. Even the seeds they left behind can reveal a lot about early humans.

All of these archaeological discoveries have vastly increased our knowledge of early history, but we are always forced to make intelligent and reasoned guesses about these distant periods because we lack written records.

Uncovering Each Stratum of Pre-history

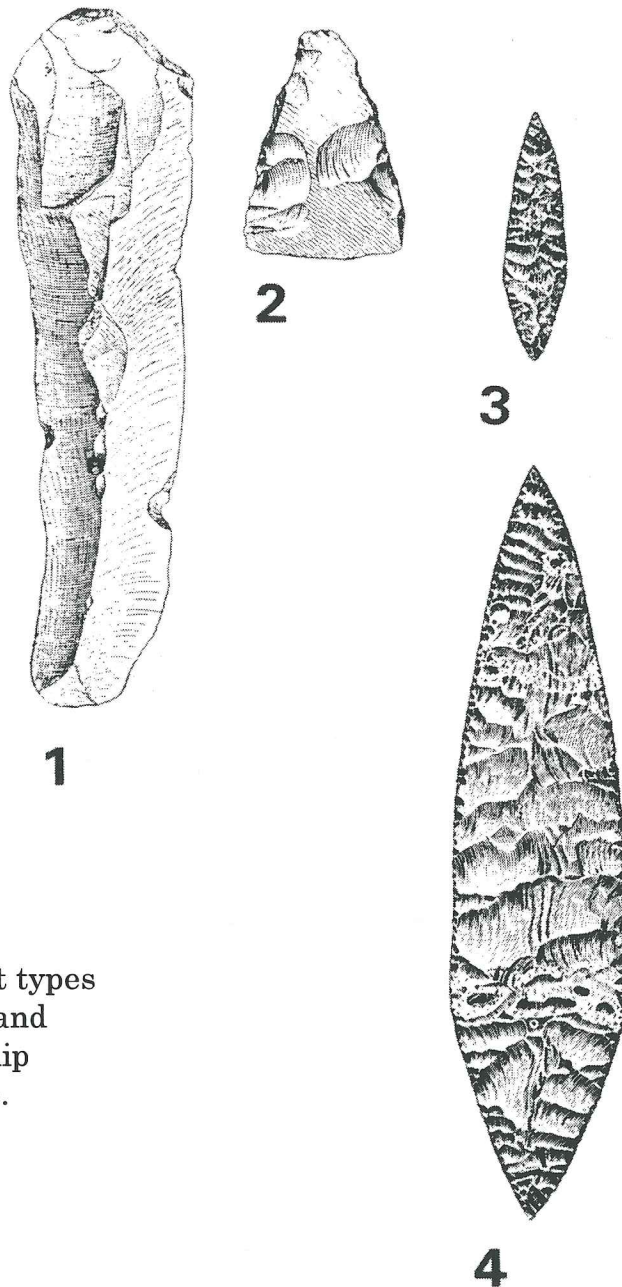
The picture below represents 12 layers of an archaeological site. The archaeologist must determine where each layer of structures, representing a period of history, begins and ends, and then mark off these levels. This is a very difficult task in Mesopotamia since the basic building material, mud brick, is so similar to the earth in which it is buried. After a level is defined, excavators try to determine its age by studying the evidence in it. A piece of pottery or a special tool known to be from a given period can be very helpful in identifying the time period of a given layer. Once one object has been dated, archaeologists can assume that most other objects at the at the same level were made at the same time.



Illustrated by Alex Symcox

## Stone Age Tools

1. Knife blade
2. Chisel blade
3. Arrowhead
4. Javelin head



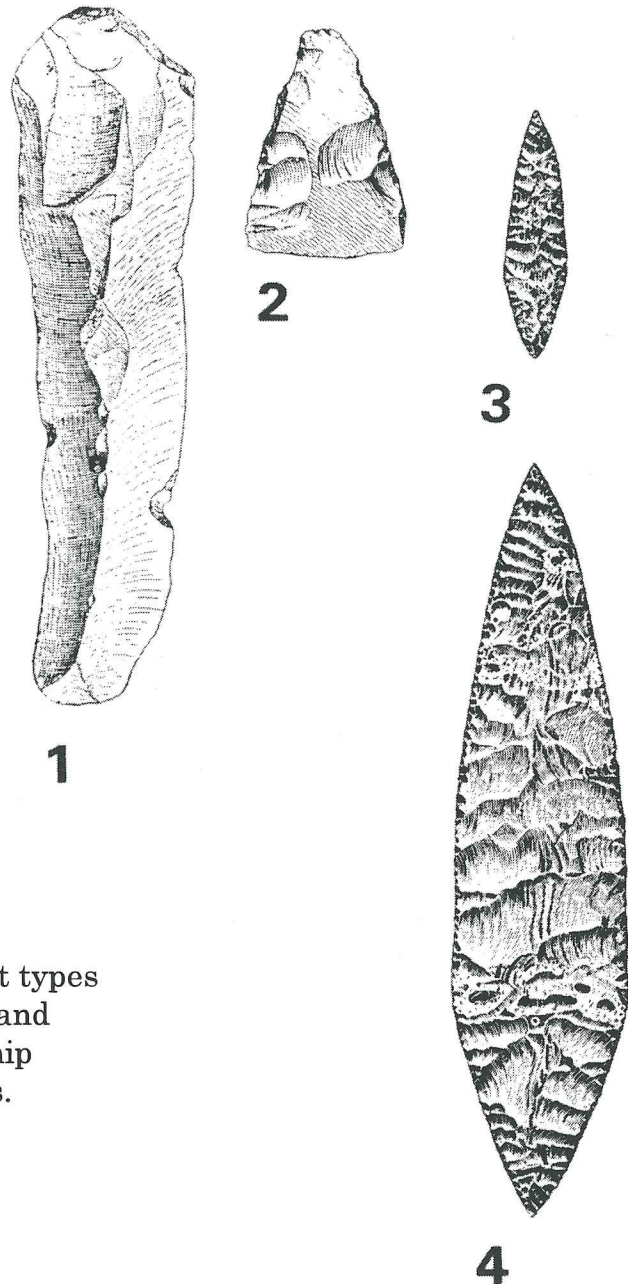
These tools show how different types of tools could be made of flint and also how styles of craftsmanship changed during the stone ages.

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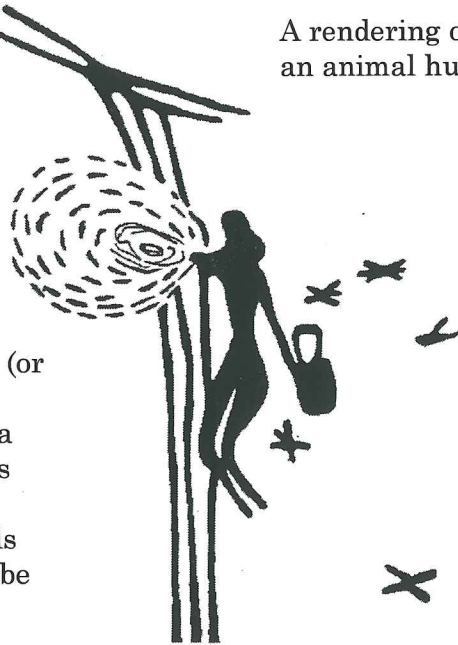
Stone Age Wall Paintings



A picture of a man dressed up like an animal.

A rendering of a cave painting of an animal hunt.

In this late prehistoric cave drawing from Spain, a man (or woman) is on a rope ladder, gathering honeycomb from a hole in a rock while the bees buzz about. Another figure below, not shown here, holds the ropes. Did they need to be able to talk to each other?



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Bottom: Illustrated by Carole Collier Frick.

## Permanent Houses and Settlements

One of the major consequences of the human invention of farming and herding was that humans no longer had to follow their food source. With their cultivated fields and their cattle nearby, humanity was able to settle permanently in villages. And, as you will study later, similar villages would, in time, become cities and eventually great civilizations.

In the Old Stone Age people lived in rock shelters, caves, simple wood and hide houses, or “pit houses” dug in the ground. These homes were temporary, and people would move on depending on the season of the year or the availability of the hunt. With the advent of agriculture, people could build more permanent dwellings made of wood or mud bricks.

As you will see by analyzing the drawings of houses and villages from the seventh millennium B.C., houses became more and more sophisticated, being precursors of our houses today. You will discover this by looking at two very important archaeological discoveries in the village of Beidha (Bay-dah) in present-day Jordan, and the settlement of Çatal Hüyük (Chah-tahl Hooyook) in present-day Turkey.

The first houses excavated from the Neolithic period were circular in form (for example, the houses at Beidha and Jericho). These homes were simple and housed at most two people (see **Illustration 3A**). The next phase in domestic architecture, as seen in the later stages of Beidha and at Çatal Hüyük in Turkey (see **Illustration 3B** and **Illustration 3D**) was that of rectangular houses, each having large rooms with passageways from one to another. Floors were now paved with plaster and often painted. There were built-in benches and hearths for cooking. One even finds an enclosed pen for animals.

When you look at these pictures along with their descriptions and when you read the quotations by Diana Kirkbride, the archaeologist who uncovered Beidha, try to imagine what life was like in those early villages. You will discover that people had specialized professions which were completely separate from the procurement of food.

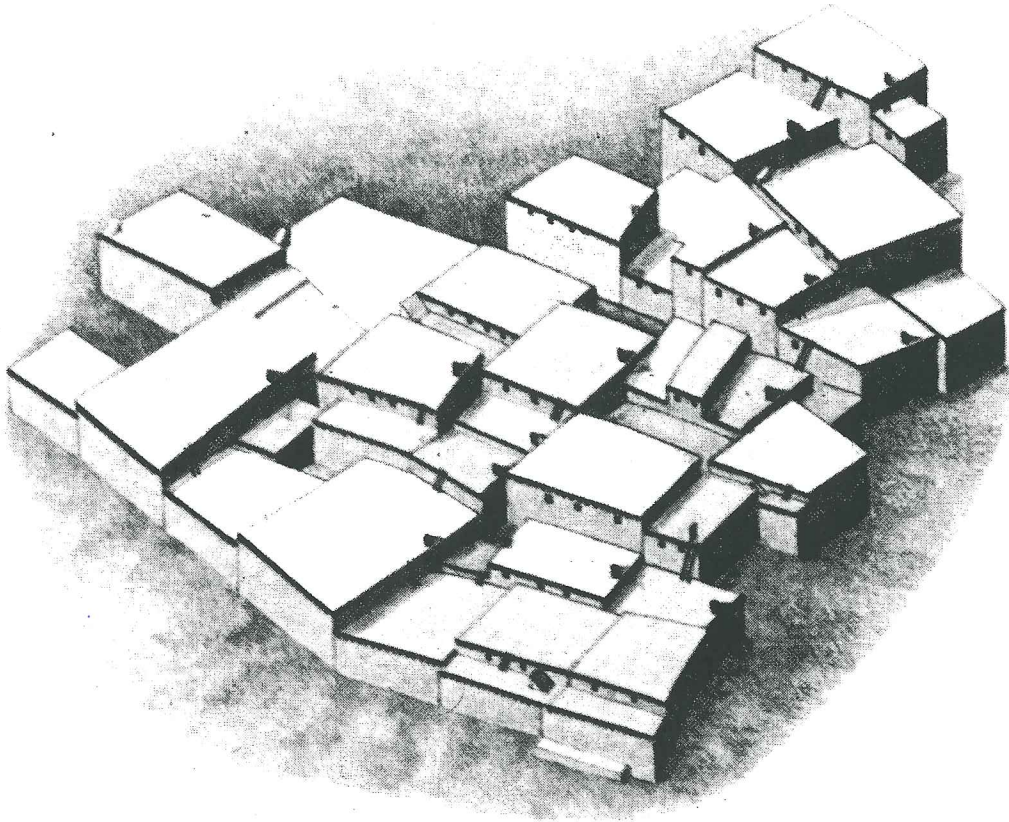


### Çatal Hüyük: A Case Study

Çatal Hüyük is one of the largest excavated sites in the Ancient Near East, located in the central plain of present-day Turkey. The period of occupation which has been excavated is from 6250-5400 B.C. Consult the drawings in Illustrations 3C and 3D to better understand the descriptions which follow:

- The site is one of the largest of the Neolithic period. It covers 32 acres and contains over 1,000 houses with a population of 4,000 to 5,000. It was discovered in 1958 by James Mellaart, an English archaeologist.
- It has been beautifully preserved due to a catastrophic fire which baked the clay walls.
- The houses are highly standardized according to a common floor plan. They are usually about 25 square meters in area. They consist of a living room and a smaller storeroom. On one end was a built-in cooking area with a hearth. Furniture such as sleeping or work platforms were built in.
- There are no doors in these houses. Access was from an opening in the flat roofs with a ladder on the south wall. This hole in the roof also served as a smoke hole for the hearth.
- Houses were rectangular and built up against one another. There were no streets and lanes for pedestrians. All communication was by roof-top. The structure of the city did not allow for individual rebuilding when a house needed it; this had to be done as a group.
- Roof levels were staggered to admit light through windows.
- There were courtyards for animals.
- Simple irrigation ditches were found.
- 90 percent of the animal bones found were those of cattle.
- An abundance of obsidian stones were found here even though obsidian is not native to this region. In fact, it is native to an area 250 kilometers away.

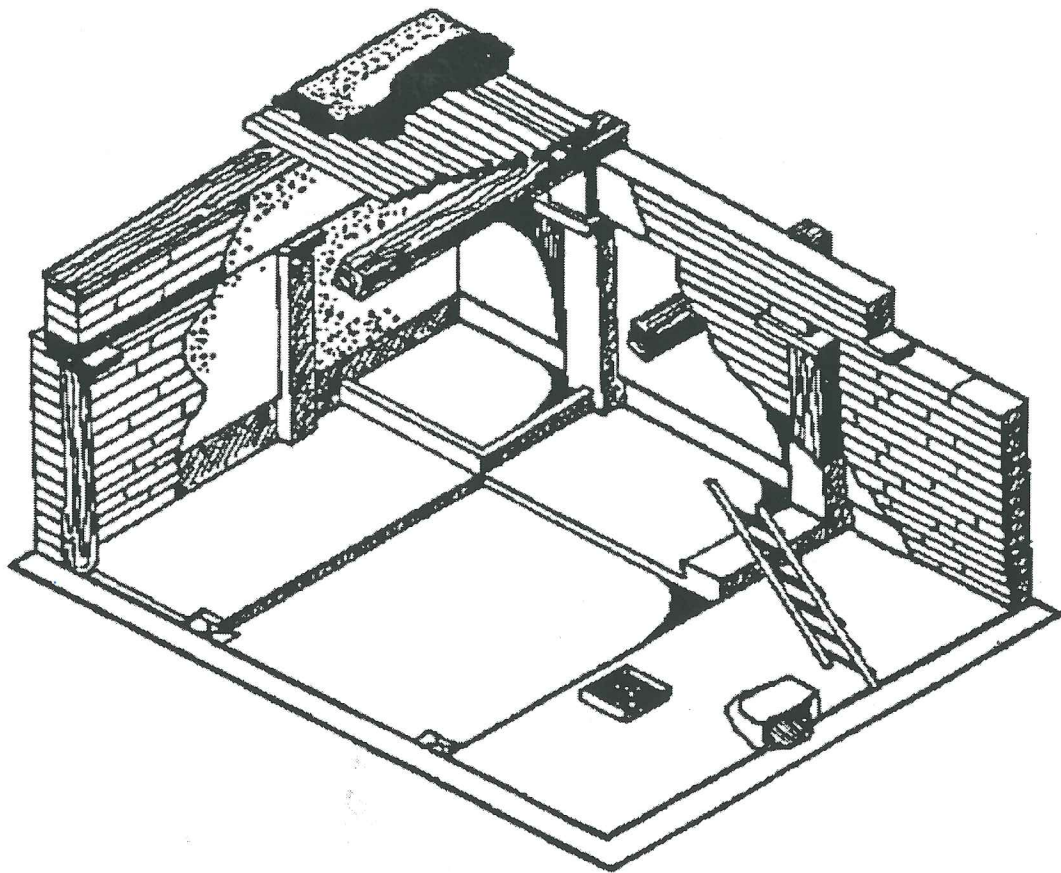
## Architectural Structure: Çatal Hüyük



0	3	6	9	ft
0	1	2	3	m

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## Architectural Structure: Çatal Hüyük



Diagrammatic view of a typical room at Çatal Hüyük showing timber framework, panelling and platforms, bench, hearth, and ladder. Illustrated by Carole Collier Frick (after Mellaart).